## Public Health Then and Now

# The Agrarian Myth and Policy Responses to Farm Safety

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#### Introduction

Agriculture has always been and continues to be a hazardous occupation. While occupational injury and death rates have been declining in other occupations, they have only declined marginally in agriculture. For example, fatality rates in mining and construction fell by 78% and 50%, respectively, between 1960 and 1988, while those in agriculture declined by only 17% during the same period.<sup>1,2</sup> With the implementation of federal and state programs (such as the Occupational Safety and Health Act of 1970 and the Federal Coal Mine Health and Safety Act of 1969), which essentially targeted nonagricultural occupations, injury rates in mining and construction declined, leaving agriculture as the nation's second most hazardous occupation. Only mining has higher injury and fatality rates. The National Safety Council estimates that 1500 people died and 140 000 people were disabled as a result of agricultural work injuries in 1988.<sup>2</sup>

Farm injuries are associated with a wide variety of agents, including farm machinery, animals, tools, and chemicals. No single agent explains a majority of nonfatal injuries; a 1987 National Safety Council study, for example, found that machinery, the largest identified source of injuries, accounted for only 17.6% of injuries.3 However, approximately half of all fatal farm injuries involve a tractor,4 and half of these tractor-related deaths result from rollovers.5-8 Farm injuries can occur to anyone on a farm, but farm owners and their families suffer significantly more injuries than do hired farmworkers.9,10 Injury risk is related to the size of the farm, increasing as farm size increases.10 The type of crops grown also affects injury rates: fruit farms have the highest injury rates while grain farms have the lowest.<sup>2</sup>

Continued high numbers of agricultural injuries and deaths have prompted the public, the press, politicians, health care professionals, and the farming community to put political pressure on the federal government to "do something" about agricultural safety. The apparent success of regulatory approaches to farm safety in other countries has been important as well.11 In response, various policy proposals have been made to reduce agricultural injuries and deaths, including mandating changes in machinery, 8,12,13 increasing research and educational funding,12,14 and promoting other public health measures.15

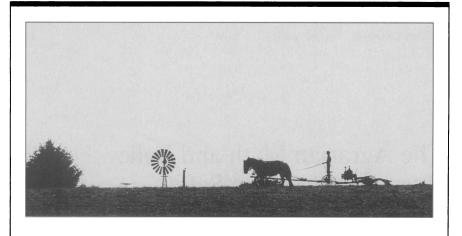
Prior to reaching policy conclusions about how to respond to farm injuries, however, it is essential to understand the background of agriculture's current safety environment and the questions it poses. America's cultural image of agriculture the "Agrarian Myth"-was successfully used to obscure the issues involved with agricultural safety policy debates in the 1970s. The myth helped create the current occupational safety environment, and it could be used to craft the environment in the future. This paper discusses such usage, particularly in light of federal responses to agricultural safety. Additionally, it reviews the potential implications for current policy responses to agricultural safety, and it identifies several key questions and value judgments that must be addressed before any policy response can be developed.

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## ABSTRACT

Agriculture's status as one of the nation's most hazardous occupations has been an impetus for a reexamination of the federal role in agricultural safety and for various proposals to make farming safer. During the 1970s congressional debate and farm group testimony that led to agriculture's current exemption from the Occupational Safety and Health Administration's enforcement efforts, regulation foes made use of the "Agrarian Myth." The myth portrays farmers as the bedrock of democracy, suffering so that society may prosper and living a natural life away from the artificiality and evils of cities. Despite the inaccuracy of its images, the myth is a potent symbol in American culture, and its influence could arise again in current policy debates. This paper examines specific issues that may be obscured by the myth but that must be addressed in any agricultural safety policy debate. It then recommends that responses to agricultural safety be carefully considered and that value judgments about what the issues are, who would benefit, and who would bear the costs be explicitly discussed during debate. (Am J Public Health. 1994;84:1171-1177)



An image of farming as romantic idyll; an Amishman works his field in Pennsylvania. Photo courtesy of Agricultural Information Services, College of Agricultural Sciences, Pennsylvania State University.

### The Agrarian Myth

Cultivators of the earth are the most valuable citizens. They are the most vigorous, the most independent, the most virtuous, and they are tied to their country and wedded to its liberty and interests by the most lasting bonds.

-Thomas Jefferson<sup>16</sup>

Agrarianism, a philosophy most often identified with Thomas Jefferson, has been an important influence on Americans' view of agriculture and on American political and social movements since the early days of the nation. Agrarianism holds that farm life produces better people and that farmers are more democratic, honest, independent, virtuous, selfreliant, and politically stable than city dwellers.<sup>17</sup> At the same time, however, this vision recognizes that the farming life is full of hardships. Work is tiring, income is low, and farmers have little control over the prices they receive. Farmers are felt to be owed a social debt by others because they suffer so that a democratic society might prosper.<sup>18</sup>

Jefferson's often-quoted comments about farming were made in 1785 during the political debate that took place before adoption of the Constitution. Drawn upon the writings of Aristotle, Hesiod, Cicero, Virgil, 19,20 and European Romantic Thought<sup>21</sup> to strengthen his arguments for states' rights and against the creation of an urban aristocracy, 22 Jefferson's remarks were practical and political, 16 not romantic.

Through the writings and speeches of Henry David Thoreau, William Jennings Bryan, and Aldo Leopold, among others, these political arguments developed into the moral rhetoric that characterized agrarianism in the decades that followed.

Since then, agrarianism has played an important role in American political movements, including the Grangers, the Populists, and some parts of the environmental movement.<sup>23</sup> It served as a base for the Populists' critique of urban industrialism<sup>20</sup>; the antimodernism of the 20th century<sup>24</sup>; the back-to-the-land movements of before World War I, the 1930s. and the late 1960s and 1970s<sup>24</sup>; and the concern about saving the family farm during the 1980s,<sup>25</sup> being altered to fit the needs of its proponents and the changing political economy. Currently, it sustains support for federal farm programs despite high program costs and the relatively small number of farmers in the voting population.<sup>17,26</sup>

Agrarian values are among the most fundamental and important of those attached to agriculture<sup>18</sup> and are widespread throughout American society. <sup>22,23,27,28</sup> They undergird support for family farming, <sup>28</sup> helping to make the family farm a cherished image in American culture. <sup>17</sup> They are also associated with people's willingness to endorse state intervention in agriculture. <sup>28</sup>

In truth, however, the values of agrarianism conform to the realities of neither late 19th-century agriculture<sup>21</sup> nor modern agriculture.<sup>17,18,26,29,30</sup> Nor does the monolithic structure of agriculture implied by the myth exist today. Although farming in the 1990s is primarily a family-run occupation with few hired

employees,\* the diversity of farms and their status vis-à-vis the rest of society are much different today than they were even 40 years ago.

Forty-nine percent of farms in the United States are small operations with annual sales of less than \$10 000 a year. These farms produce only 2.5% of the nation's agricultural production,<sup>31</sup> too small an output to be an effective source of market competition<sup>30</sup> or to play a major role in the nation's food system. Most of these farms are hobby farms or at best provide supplemental income to the families, with the major operator working full time at an off-farm job. These farm households' average net cash income from agriculture was negative for each of the last 9 years.<sup>31,32</sup>

In contrast, farms with annual sales of \$100 000 or more account for only 14% of total farms but account for 76% of agricultural production.<sup>31</sup> Operators of these large farms typically have higher income and wealth than the average American.<sup>29</sup> Many of these farms are incorporated, but because 91% of such corporate farms are wholly family owned and operated,<sup>31</sup> they bear little relation to the corporate farms often denigrated in agrarian thought. Overall, non-family-owned farm corporations account for only 0.3% of all farms and for a little more than 6% of all agricultural sales.<sup>31</sup>

Medium-sized farms have entirely different needs. With annual agricultural sales of between \$10 000 and \$100 000, their farm operations typically are too big for the owners to rely primarily on off-farm income for survival, and too small for the owners to earn enough income from agricultural production to continue operation and sustain a reasonable standard of living. These farms represent 37% of total farms in the United States and account for 21% of total agricultural production.31 They are the farms that are typically in the most financial difficulty and are declining the most in number.

Besides the size and need differences among these farm types, the myth also disguises major geographical differences in the structure of agriculture. Large non-family-owned corporate farms, for example, play a major role in California's agriculture while being relatively unimportant in the Midwest and South.

<sup>\*</sup>According to estimates from the US Bureau of the Census and the US Department of Agriculture in 1990, more than 98% of US farms still have 10 or fewer employees.

In fact, the myth serves more as a cultural identity for Americans than as a reflection of current conditions in agriculture. Because of the strength of these agrarian beliefs in US society and the lack of experience most people have with agriculture, the myth can be especially potent in political debates. Policymakers and activists who use agrarian images in support of their causes can tap a broad base of potential supporters.<sup>23</sup> Furthermore, images of the virtuousness of agriculture and of farmers' sacrifice for the good of all obscure the realities of modern agriculture by shifting the debate to a symbolic and emotional level.

# The Occupational Safety and Health Act

Ironically, the image of farmers as independent and responsible individuals and of agriculture as a special occupation has contributed to the exclusion of most of the farm population from the Occupational Safety and Health Act, the major federal occupational safety program. As a result, most US farms lie outside Occupational Safety and Health Administration (OSHA) coverage, which helps explain the continued high rate of injuries and deaths to farm owners and employees.

The Occupational Safety and Health Act of 1970 was landmark occupational safety legislation, placing all work sites in the nation under federal safety guidelines. It requires employers to furnish a safe workplace for their employees, with the federal government establishing safety standards, inspecting workplaces to enforce these standards, checking employer compliance with these standards, assessing penalties for employers found violating the law, and conducting research and training on safety and health. The act guarantees every working man and woman a safe and healthy workplace.

Agriculture as an industry was not singled out when the bill was first drafted, nor did farm organizations ask for special treatment when it was passed. During congressional hearings in 1970, for example, the American Farm Bureau Federation recognized the need for a "Federal umbrella over the area of occupational health and safety"33 and asked that agriculture be treated "the same as or similar to" other employers. The sole exemptions the federation desired were for highway transportation and the use of pesticides (ostensibly because these were already regulated by other federal and state laws).33



This image of workers sorting tomatoes on a mechanical tomato harvester is atypical of the vast majority of farms. More than 98% of US farms have 10 or fewer employees. Photo courtesy of Agricultural Information Services, College of Agricultural Sciences, Pennsylvania State University.

Once passed, however, the act began to attract opposition from farm owners and other businesses. Particularly onerous to farm owners were the recordkeeping requirements and the interpretation, complexity, and changing nature of its regulations. For example, OSHA safety regulations were posted in the Federal Register, a resource few farm owners or small businesses had access to or read. Some business owners argued that safety engineers and lawyers were necessary to interpret the regulations<sup>34</sup>; others were constrained by rulings that prohibited OSHA inspectors from interpreting the regulations or giving advice on how to get workplaces into compliance without risking fines, since these inspectors were required to cite any and all violations discovered.

Congressional hearings OSHA's implementation were held over several years, and many farm groups came to testify. People opposed to OSHA involvement in agriculture used the myth to bolster their arguments. Eight national farm groups\* joined other state and county agricultural groups and individual farm owners to testify during debates over whether there should be an agricultural exemption. Not one individual farm owner or agricultural organization representing farm owners testified in support of OSHA or against the exemption during these hearings.

In response to this pressure, Rep Joe Skubitz (R-Kan) offered an amendment in 1976 to exempt all farms with 10 or fewer workers from OSHA regulations. His remarks when introducing the amendment were laden with mythic images about family farming and lauded the contribution agriculture makes to the nation's economy and well-being.35 Other congressmen echoed these images. Sen Clifford P. Hansen (R-Wyo) claimed it was time "to listen to the small farm owners and ranchers who have done so much for this country ... [and] do something for them." Rep Robert H. Michel (R-Ill) said that family farmers could not put up with "these kind of silly regulations," which could "just force [the family farmer] to throw in the towel and sell out to some corporate entity." Rep Virginia Smith (R-Neb) claimed that opponents to the proposed exemption were "city cousins" who have little interest "in understanding small producers" and that the OSHA regulations would "further stimulate the decline of the

<sup>\*</sup>These included the American Farm Bureau Federation, the National Milk Producers Federation, the National Livestock Feeders Association, the National Council of Farmer Cooperatives, the Agricultural Producers Labor Committee, the American National Cattlemen's Association, the National Cattlemen's Association, and the National Association of Wheat Growers.



A person working alone is much more typical of modern farm work. Photo courtesy of Agricultural Information Services, College of Agricultural Sciences, Pennsylvania State University.

family farm." Sen Jacob K. Javits (R-NY), even while arguing against the amendment, noted that farmers have always had "a very sympathetic feeling around here," while Rep Silvio O. Conte (R-Mass) voiced a belief that "farmers have a special problem." 35

Testimony by both congressmen and witnesses before subcommittees, and arguments during floor debate, explicitly noted the dangerous nature of agriculture. Rep William D. Ford (D-Mich), for example, noted that agriculture has "the highest rate of injuries for employees of any industry in the country. [Agriculture] is worse than steel mills.... I have seen statistics that it is the most dangerous job there is around."36 Sen Robert Dole (R-Kan) acknowledged that "farming is an especially hazardous business,"35 and Sen Strom Thurmond (R-SC) agreed "that farm-related injuries are entirely too high and that too many deaths occur each year through farm accidents that could usually have been prevented."35 Despite such recognition, however, Dole and Thurmond voted for the exemption.

The amendment passed the House by a vote of 273 to 124, and a similar amendment, bundled with an amendment to prohibit fines to any business for first-instance violations of a nonserious nature, passed the Senate by a vote of 90 to 1.\* The conference report agreed upon the House language, exempting farms with 10 or fewer workers from OSHA

enforcement. This agricultural exemption has been continued in every Labor-HHS appropriations bill since that time.

Several factors contributed to the granting of the agricultural exemption. The OSHA act was very unpopular with many businessmen and conservatives, who were willing to use any means to attack OSHA. Exempting any occupation (such as agriculture), they recognized, could later set a helpful precedent for exempting their own businesses or occupations. Moreover, by implying that the heavy and unthankful hand of government was trying to squash the spirit of independent family farmers, who had sacrificed and suffered to make America strong, OSHA's opponents used the myth to frame the debate in especially potent and emotional terms. This enabled them to draw attention away from their self-interest and political machinations and to vote against the regulations without appearing to be uncaring or antilabor. As a result, the need to prevent injuries in one of the nation's most dangerous occupations was slighted.

#### Future Policy Responses

Now that the public is once again focusing on unacceptably high injury and death rates in agriculture, special interests may again use the myth to dominate debate over policy. Farm owners may attempt to obscure the issues involved with agricultural safety and shift compli-

ance costs of any new policies from themselves to taxpayers. In particular, several key questions may go unanswered: (1) What are the issues involved with agricultural safety, and what should the performance goals from a federal agricultural safety program be? (2) Who is the target population? (3) Who should pay the costs of such a program? These nonmutually exclusive issues must be decided before the appropriate form of response is selected. Such issues intrinsically require difficult value decisions, and so they should be publicly discussed and not obfuscated by the myth.

#### 1. What Are the Issues?

Most people agree that injury rates in agriculture are tragically high and need to be reduced. Agreement on how such reductions should be achieved does not exist, however, because people perceive and rhetorically frame the agricultural safety issue differently. During congressional testimony and floor debates about the OSHA exemptions, for example, proponents of the farm exemption focused on farm owners' exposure to the risks, stressing that it was in the farm owners' own interest to be safe and that they did "not need big government in Washington to remind them that they need to make their farm equipment and farm environment safer for themselves, their families, and employees."35 Thus, self-interest precluded the need for mandatory safety requirements and punitive measures to make farms safer. Said one farmwife, "Congress cannot legislate laws which make us more concerned about the health and safety of the people we love the most."37 And a farmer confirmed this self-interest, noting that "90 percent of the accidents are happening to me, my wife, and my kids."38 Such arguments attempted to stifle any changes in federal agricultural safety policy, even though some policy alternatives (such as changing machinery design or performance standards) would not have significantly affected agricultural practices.

Opponents of OSHA exemptions, in contrast, concentrated their attention on farmworkers, portraying them as employees who would not be protected. The US Secretary of Labor, W. J. Usery, Jr, was quoted as saying that the amendment "would deny to farmworkers on the

<sup>\*</sup>The Senate amendment exempted farmers averaging 5 or fewer workers a day throughout the year, but not more than 12 persons on any one day.

majority of the nation's farms the effective protection of safety and health."35 Farmworkers' need for guaranteed protection was emphasized, and the size of the farm they worked for was judged irrelevant. Sen Thomas Eagleton (D-Mo) agreed, saying "you're dead whether or not the company had greater or less than ten employees."39 The United Farm Workers Organizing Committee argued that even one worker was entitled to protection.40

Both perspectives are correct. Farm owners already have major incentives to make "safe" decisions and therefore see little reason to have their abilities to choose restricted, while workers have a major interest in being assured of a safe workplace. The conflict between farm owners as decision makers and farm employees wanting freedom from injury remains central in the political debate. The former position is currently reflected by the American Farm Bureau Federation's primary focus on education, and the latter position is echoed by others' emphasis on legislative responses. Alternative policies that could bridge these perspectives are possible, but they will require careful thought to develop.

Further difficult judgments must be made about the desired ends from any federal agricultural safety policy. Is the concern merely to reduce the number of injuries and deaths, or are other issues, such as preventing farms from going bankrupt, also important? If the sole intent of such a policy is to reduce injuries, for example, the most dramatic and rapid decrease in injuries would occur simply by drastically reducing the number of farms. Such a policy would be unacceptable to most individuals, but this fact alone demonstrates that other goals are unavoidably involved in this policy debate. Such goals may include ensuring that farm owners and employees are not hurt financially by prevention efforts, maintaining the autonomy of farm owners, and keeping total federal expenditures on the policy below a certain amount.

In fact, the issue of agricultural safety is not just one of reducing injuries but is the combination of all these performance goals, which must be involved in any policy response. These other goals should be discussed openly because they have major impact on the acceptability of alternative policies, on the level and incidence of program costs, and on the impact of safety policy on the agricultural community. The myth may mask their inclusion in a policy, preventing careful

examination of whether any such goals are appropriate or of what their impact may be.

#### 2. Who Is the Target Population?

Part of the difficulty in clarifying the appropriate target for agricultural safety programs arises because the language used to describe people on farms is often ambiguous. Does the term *farmers*, for example, refer to owners or partners of farms? Or does it include everyone working on farms, including hired employees who only provide labor to the business? Similarly, does the term *farmworkers* denote wage employees of farm employers, or does it include anyone who works on the farm, including the owner-operators, partners, and family members?

Such distinctions are important because they influence how the agricultural safety problem is perceived and what alternative policies are considered appropriate. Farm owners may do physical work on their farms, but they are businessmen, not workers. They have decision-making power over the investment decisions that directly affect the level of risk on their farms, and their "stake" in the farm operation most importantly includes returns on capital and capital gains. Governmental relationships and taxpayer responsibilities to farm owners are thus more akin to those the government has with small businesses than to those it has with hired workers. These distinctions and their implications are blurred without careful use of language.

The term farm suffers from similar ambiguity, especially because the power of the myth disguises the diversified nature of American agriculture. Even if the risks on small, medium, and large farms were similar, the great differences among farms suggest that the appropriateness of agricultural safety assistance should vary for each. While reducing injuries on all farms is vital, the bundle of other implicit or explicit performance goals in safety policy responses may be applicable to only a subpopulation of farms. For example, financial or material assistance may be perceived as an appropriate means for keeping medium or large farms from becoming economically disadvantaged by safety regulations; this is because these farm operations are a central part of the households' income and because the large contribution they make to aggregate US food production makes these farms crucial to consumers. Such justifications would not apply, however, for similar aid

to farms with less than \$10 000 in annual

Differentiating among farms by size, primary product, or economic condition can have enormous impact because it affects target population size and thus program costs. It can make possible specially targeted programs that could never be adopted for all farms because of the cost. Similarly, adopting the myth's homogeneous image of impoverished farms could allow wealthy or hobby farm owners to be as eligible for assistance as their more highly leveraged farm neighbors.

Whom to target on these farms is also important to consider. Public concern and sympathy for hired farmworkers should not necessarily exclude similar attention to farm owners and managers. Most people who work on US farms are farm owners and their immediate families, not hired farmworkers. <sup>41</sup> The predominant role farm families play in agricultural production is reflected in injury statistics, which show that farm owners and their families suffer the vast majority of farm injuries. <sup>9,10</sup>

#### 3. Who Should Pay?

A related issue is who should bear the costs of agricultural safety policies. These costs potentially include opportunity costs (if uncertified equipment is forcibly and "prematurely" retired), costs to certify old machines for use (if equipment must be retrofitted with safety mechanisms), increased purchase costs for new equipment (if new machinery is needed to comply with new and more expensive mandatory safety standards), and program administration costs (such as for enforcement, education, and consultation), depending upon how the policy is formulated and implemented.

Because of the agricultural images conveyed by the myth and the rhetoric over the "right to farm," the difficult value considerations about who should pay for agricultural safety may too easily go unexamined. As a result, the costs could be shifted to taxpayers without considering if this process is justified. Is the right to farm, for example, a carte blanche for farm owners to have others pay for agricultural safety, or can it only be exercised if a person has access to the resources (such as land, labor, and equipment) physically required for agricultural production to occur? At what point does the right to farm end and the taxpayers' right to avoid supporting farmers begin? Should the presence of a few beef cattle or sheep give a homeowner the right to receive money from taxpayers to make his or her hobby safe? Questions about the distribution of costs, whether paid entirely by farm owners, by taxpayers, or by some combination of the two, are vitally important and must be openly considered.

#### Discussion

The current high rate of injuries and deaths in agriculture deserve renewed attention, but it is not apparent what kind of policy responses are warranted. Careful policy consideration should include clearly specifying what the issues are and what performance goals are desired, precisely determining the target population (who is at risk and who should be given help), and justifying the distribution of program costs.

The high rate of injuries does not mean that the policy response can be rash; previous experience with agricultural safety policies demonstrates that doing something quickly without adequate thought can cause even more problems in the long run, as evidenced by farm owners' current negative attitudes toward an active governmental role in agricultural safety. The poor design of OSHA's original implementation destroyed any credibility of OSHA in farm owners' eyes. Better original policy design could have avoided this backlash.

Similarly, "temporary" policies too easily become permanent owing to the inertia of the decision-making process. It is clear that many congressmen who voted for the agricultural exemption did not intend for it to become permanent. Feeling that then-current OSHA regulations and methods of enforcement were inappropriate for agriculture, they saw the exemption as a way of showing their displeasure. Sen James Abourezk (D-SD), who introduced the exemption amendment in the Senate, said he was seeking to give OSHA "an opportunity to find some other way of making farms safe, other than going out [to farms] ... with the idea of vengeance."35 Other support for the amendment came from Senator Dole, who was not opposed to "reasonable" OSHA standards in farming, but only hoped that "in the future, OSHA will carry out its mandate in a less objectionable manner"; from Sen Lawton Chiles (D-Fla), who said Congress was going to exempt farm owners "until we get a chance to get at some reform legislation"; and from Rep Paul Findley (R-Ill), who claimed it was "highly worthwhile . . . to suspend OSHA operations on these farms (to) give the OSHA inspectors the time to find out what American agriculture is really all about."35 Unfortunately, OSHA never learned more about agriculture, nor did reform legislation to put agriculture back under OSHA's umbrella ever occur.

The need for careful policy design arises precisely because of the importance of the agricultural safety problem. The lack of clear debate because of the myth has already cost farm employees dearly by contributing to the exclusion of most farms from OSHA protection. If this policy is changed to protect these workers, images from the myth must not again be allowed to cloud or obscure the important issues involved with agricultural safety.  $\square$ 

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